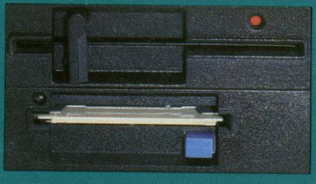
IBM Personal Computers

Personal Computer Systems



IBM

Introduction

Personal computing for everyone

Whether you need a PC to organize your accounting department, calculate your income tax, or help your children with their homework, IBM has one that's just right for you. And this booklet, "Personal Computer Systems," can help you find it.

If you want a computer to take with you on business trips, for example, make the IBM PC Convertible your traveling companion. If you've got a small but growing business, start with the system that started it all: the IBM Personal Computer. If your office has a heavy work load, let the IBM Personal Computer XT™ or IBM Personal Computer AT® system make business more manageable. If you want to run extremely advanced applications—and share them with several colleagues simultaneously—put an IBM RT Personal Computer to work for you. If you need to work with both host and PC applications, choose an IBM Personal Computer AT/370, IBM 3270 Personal Computer, or IBM 3270 Personal Computer AT.

Learn about the features and benefits of each of these IBM systems in the pages that follow. Then use the descriptions and charts to choose the PC that best meets your computing needs.

Of course, the IBM PC you select today is designed to meet tomorrow's needs, too...with built-in growth potential and an array of options. Pick up a copy of the "Hardware Options" booklet and find out about IBM options that can expand your PC's versatility and computing power.

The following symbols represent the IBM PCs included in this booklet:

PCC	IBM PC Convertible
AT	IBM Personal Computer AT
XT	IBM Personal Computer XT
PC	IBM Personal Computer
PC*jr*	IBM PC*jr*
RT	IBM RT Personal Computer
370	IBM Personal Computer AT/370
3270	IBM 3270 Personal Computer and 3270 Personal Computer AT

IBM PC Convertible

Computing power to go...

Weighing in at about 12 pounds, the IBM PC Convertible is portable enough to go anywhere...yet powerful enough for your office.

With PC Convertible, you get full-size performance in a portable PC. Slip the compact computer into its carrying case, and you can take it most places you do business. Prepare presentations in hotel rooms. Or perform advanced calculations at construction sites.

...or to stay

PC Convertible is also a powerful office PC. To convert PC Convertible for extended desktop use, just detach the liquid crystal display (LCD), attach an optional display, and plug the system into an AC outlet.

Feature	Benefit
4.77 MHz, 80C88 microprocessor	Runs IBM PC applications as quickly as the IBM PC but uses less power
256KB user memory, expandable to 512KB	Manages large amounts of information and runs advanced software applications; retains work in progress during power-off periods
Two front-facing 3.5-inch diskette drives[1]	Store up to 150 pages[2] of information on each 3.5-inch diskette; allow you to load diskettes conveniently and easily
IBM PC 3.5" External Diskette Drive	Transfers data stored on selected models of IBM PC systems to 3.5-inch diskettes, allowing you to share programs and data with the IBM PC Convertible
PC Convertible Keyboard	Resembles the familiar IBM PC keyboard in design and performance; offers full-size keys and calculator keypad for rapid data entry
Rechargeable battery pack	Provides up to 10 hours of cordless operation (with average use)
Liquid crystal display	Displays as much data as a full-size monitor; features an easy-to-read, low-glare screen
Plug-in connectors	Allow you to expand your system by adding peripherals

IBM Personal Computer AT

Quick response for quick decisions

Built for speed, IBM Personal Computer AT systems now feature an 8 MHz microprocessor on some models that can help you get work done up to 33 percent faster than before. These models give you enough memory to accommodate several users, support sophisticated PC applications, and exchange files with hosts.

Feature	Benefit
8 MHz models: 16-bit Intel 80286 microprocessor	Processes data quickly and efficiently in network or multiuser configurations
6 MHz models: 16-bit Intel 80286 microprocessor	Processes data quickly and efficiently in single-user or multiuser configurations
8 MHz models: 512KB user memory, expandable to 15.5MB 6 MHz models: 256KB user memory, expandable to 3MB	Accommodates a variety of software, including multitasking, networking and multiuser applications (depending upon expansion slots available)
30MB fixed disk drive	Stores and provides quick access to up to 15,000 pages[2] of programs and information
20MB fixed disk drive	Stores and provides quick access to up to 10,000 pages[2] of programs and information
5.25-inch, 1.2MB diskette drive	Stores and provides access to up to 600 pages[2] of programs and information on a single double-sided diskette
Eight expansion slots	Allow you to expand your system by adding memory and peripherals
Enhanced Keyboard (available on 8 MHz models)	Includes: 12 function keys to simplify command entry; separate numeric and cursor-control keypads

IBM Personal Computer XT

Fast access to large amounts of information

With the IBM Personal Computer XT system, you can store dozens of programs and information files—so they're ready when you want them. And, if you choose the IBM Personal Computer XT Model 286, you get an added advantage: extremely fast data processing.

Feature	Benefit
4.77 MHz, 16-bit Intel 8088 microprocessor	Processes data quickly and efficiently
XT Model 286: 6 MHz, 16/24-bit Intel 80286 microprocessor	Processes data more quickly than other XT models
Diskette-drive models: 256KB user memory, expandable to 640KB XT Models 088/089: 640KB user memory	Manages large amounts of information and runs most IBM PC-compatible software applications; allows you to add memory without using expansion slots
XT Model 286: 640KB user memory, expandable to 12.6MB	Accommodates sophisticated applications, including multitasking, networking and multiuser operations (depending upon expansion slots available)
5.25-inch, 360KB diskette drive	Provides the system with room for two diskette drives, each of which stores up to 180 pages[2] of programs and/or data
3.5-inch, 720KB diskette drive	Stores up to 360 pages[2] of programs and/or data; supports 3.5-inch software and data diskettes
5.25-inch, 1.2MB diskette drive	Provides room on the IBM PC XT Model 286 for a second diskette drive
20MB fixed disk drive	Provides quick access to up to 10,000 pages[2] of programs and information
Eight expansion slots	Allow you to expand your system by adding memory and peripherals
Enhanced Keyboard	Includes: 12 function keys to simplify command entry; separate numeric and cursor-control keypads

IBM Personal Computer

A better value than ever

A popular productivity tool in offices, schools and homes, the IBM Personal Computer is easy to use and supports thousands of software programs—so you can stay on top of your work in such areas as word processing, accounting and education.

Feature	Benefit
4.77 MHz, 16-bit Intel 8088 microprocessor	Processes data quickly and efficiently
256KB user memory, expandable to 640KB	Manages large amounts of information and runs advanced software applications
Five expansion slots (one occupied by standard Diskette Drive Adapter)	Allow you to expand your system by adding memory and peripherals
83-key keyboard	Offers 10 programmable function keys for simplifying commands; includes a six-foot coiled cable so you can position the keyboard for comfort

IBM PC*jr*

A lightweight PC with lots of power

For a desktop computer that weighs less than 12 pounds, the IBM PC*jr* ™ packs plenty of computing power. Its high-speed microprocessor—the same one used in the IBM PC and PC XT—can help you plan your monthly budgets, compare airline fares, follow stock market activity, and much more.

Feature	Benefit
4.77 MHz, 16-bit Intel 8088 microprocessor	Processes data quickly and efficiently
64KB user memory on Entry Model 128KB user memory on Enhanced Model, expandable to 512KB on both models	Manages large amounts of information and runs many software applications
5.25-inch, 360KB diskette drive (standard on Enhanced Model, optional on Entry Model)	Lets you run application programs and store files on 5.25-inch diskettes
Built-in connectors	Allow you to expand your system by adding memory and peripherals
62-key cordless keyboard	Gives you the freedom to operate the PC*jr* from up to 20 feet away; includes PC-like keyboard performance and layout for rapid data entry

Related PC systems

Desktop model

IBM RT Personal Computer

Powerful technology for professionals

If you demand peak performance from your PC, the IBM RT Personal Computer can provide it. You can run sophisticated engineering/scientific and UNIX™-based applications on the IBM RT PC much more quickly than on any comparable computer—and share your work with up to seven of your colleagues.

Your programming and computing power is not limited by your system's user memory thanks to a built-in virtual memory unit that expands your "electronic workspace" to several times its actual size. If you're fine-tuning an engineering design, for example, you can make your schematic more specific than you could without using virtual memory.

Floor-standing model

Feature	Benefit
IBM 32-bit, Reduced Instruction Set Computer (RISC) microprocessor	Processes large amounts of data and runs advanced applications more quickly and efficiently than other PCs
Models 10 and 20: 1MB user memory, expandable to 3MB Model 25: 2MB user memory, expandable to 4MB	Accommodates sophisticated multitasking and multiuser applications as well as the additional memory required for engineering/scientific and UNIX-based programs
70MB fixed disk drive	Stores and provides quick access to up to 35,000 pages[2] of programs and information
40MB fixed disk drive	Stores and provides quick access to up to 20,000 pages[2] of programs and information
1.2MB diskette drive	Stores and provides access to up to 600 pages[2] of programs and information on a single double-sided diskette; offers compatibility with other IBM PCs
Eight expansion slots (Models 20 and 25)	Allow you to expand your system by adding memory and peripherals
Virtual memory management	Allows you to write and run programs that require more than 1MB of user memory
Personal Computer AT Co-processor	Supports IBM Personal Computer AT applications
Math Co-processor	Supports high-level mathematical calculating and modeling on the Personal Computer AT Co-processor

Related PC systems

IBM 3270 Personal Computer AT

A premium PC workstation

The IBM 3270 Personal Computer AT gives you the communications capabilities of the 3270-PC plus the fast processing power of the IBM Personal Computer AT. It not only gets work done up to 33 percent faster than the 3270-PC, but it contains a 20MB or 30MB fixed disk drive for convenient information storage.

Feature	Benefit
8 MHz, 16-bit Intel 80286 microprocessor	Processes data quickly and efficiently
640KB user memory, expandable to 2MB with the Expanded Memory Adapter (XMA)	Accommodates a variety of software, including multitasking and advanced graphics applications
One or two 1.2MB diskette drives	Store and provide access to up to 600 pages[2] of programs and information on each double-sided diskette
20MB fixed disk drive	Stores and provides quick access to up to 10,000 pages[2] of programs and information
30MB fixed disk drive	Stores and provides quick access to up to 15,000 pages[2] of programs and information
Eight expansion slots	Allow you to expand your system by adding memory and peripherals
122-key keyboard or Enhanced Keyboard	Includes: 24 program keys and special function keys to simplify command entry for office systems use or access to other computers; separate numeric keypad to improve data entry and help reduce error rate

IBM 3270 Personal Computer

Managing mainframe power

For business professionals with access to mainframe data bases—and with varied computing needs—here's the PC that brings it all together. The IBM 3270-PC gives you simultaneous access to your mainframe's applications and data files and to PC programs. Which means that one 3270-PC can do the work of two or more terminals while running software for word processing, spreadsheets, graphics or programming.

Feature	Benefit
4.77 MHz, 16-bit Intel 8088 microprocessor	Processes data quickly and efficiently
640KB user memory, expandable to 2MB with the Expanded Memory Adapter (XMA)	Accommodates a variety of software, including multitasking and advanced graphics applications
One or two 5.25-inch, 360KB diskette drives	Store up to 180 pages[2] of programs and/or data on each diskette
20MB fixed disk drive	Stores and provides quick access to up to 10,000 pages[2] of programs and information; provides faster access than diskettes to program or data files
Eight expansion slots	Allow you to expand your system by adding memory and peripherals
122-key keyboard or Enhanced Keyboard	Includes: 24 program keys and special function keys to simplify command entry for office systems use or access to other computers; separate numeric keypad to improve data entry and help reduce error rate

Related PC systems

IBM Personal Computer AT/370

A terminal, PC and System/370 all in one

If you're a data processing specialist, engineer or business professional who needs the advanced capabilities of an IBM System/370 as well as a terminal to access mainframe files and programs, you can now have both in one computer: the IBM Personal Computer AT/370. When there's a backlog at the mainframe, you can retrieve and process host data yourself—without waiting in a queue.

Feature	Benefit
Models 919 and 939: 8 MHz, 16-bit Intel 80286 microprocessor	Processes data quickly and efficiently
640KB user memory in PC mode 480KB of real user memory in VM/PC mode, expandable to 8MB of virtual memory	Manages large amounts of information and runs most IBM PC-compatible software applications (licenses available to run many IBM System/370 applications in VM/PC mode)
30MB fixed disk drive	Stores and provides quick access to up to 15,000 pages[2] of programs and information
1.2MB diskette drive	Stores and provides access to up to 600 pages[2] of programs and information on a single double-sided diskette
Eight expansion slots	Allow you to expand your system by adding memory and peripherals
Enhanced Keyboard (available on Model 939)	Includes: 12 function keys to simplify command entry for office systems use or access to other computers; separate numeric and cursor-control keypads to improve data entry and help reduce error rate; isolated PrtSc and Esc keys to help prevent accidental printing or erasing

Displays

IBM Enhanced Color Display and Enhanced Graphics Adapter

Designed for graphics and text, this display and adapter give you a choice of 64 colors for creating high-quality drawings, graphs, charts and text. Two memory expansion options can be added to provide advanced graphics capabilities.

IBM Professional Graphics Display and Professional Graphics Controller

The IBM Professional Graphics Display and Controller—developed for engineers, scientists, technicians and designers—provide a palette of 4,096 colors for creating specialized graphics.

IBM PC Convertible Color Display

When you use the IBM PC Convertible in your office, detach the liquid crystal display and connect this 13-inch color display. Then create high-impact charts or graphs in up to 16 colors.

IBM PC Convertible Monochrome Display

When you're writing letters, memos or reports, attach this optional monitor to the IBM PC Convertible. The crisp, clear text and numbers are easy on the eyes during extended desktop use.

IBM Personal Computer Color Display

The IBM Personal Computer Color Display helps you add visual impact to information. It gives you command of up to 16 colors for text and eight (two sets of four each)[3] for graphics. And it lets you highlight words and images in color.

IBM Personal Computer Monochrome Display

Providing clear, easy-to-read text and numeric data, the economical IBM Monochrome Display benefits writers, accountants and others who spend extended periods of time in front of a personal computer.

IBM PC*jr* Color Display

A high-contrast display that plugs directly into the PC*jr* System Unit, this monitor provides 16 sharply defined colors for PC*jr* software. An internal speaker for sound effects enhances educational and entertainment programs.

IBM RT PC Advanced Monochrome Graphics Display and Advanced Monochrome Graphics Display Adapter

You can watch your CAD/CAM applications take shape with the IBM Advanced Monochrome Graphics Display and Adapter. The 12-inch, 720 x 512 pixel monitor displays sharp text and crisp graphics in white against a black background. It even swivels so you can work most comfortably.

IBM RT PC Advanced Color Graphics Display and Advanced Color Graphics Display Adapter

Whether you're preparing a spreadsheet or perfecting a PERT chart, this 720 x 512 pixel display and its adapter can help you refine and highlight your work. View up to 16 colors at once—from a palette of 64—on a screen that's etched to reduce glare.

IBM RT PC Extended Monochrome Graphics Display and Extended Monochrome Graphics Display Adapter

If you spend hours in front of your IBM RT PC, the IBM Extended Monochrome Graphics Display and Adapter can extend your viewing comfort—by giving you more display space in a viewable area of 1,024 x 768 pixels. At 15 inches, the black-and-white display is three inches larger diagonally than most comparable options.

IBM 3270-PC Color Display (5272)

With this display connected to your 3270-PC, you get 3270 display compatibility for viewing 3-D pie charts, elaborate illustrations, technical schematics, and more from almost any 3279 graphics program running on a System/370 host. Also, you can use several applications simultaneously—a feature you'll find especially beneficial if you're a business or data processing professional who works with host and PC applications.

Display Compatibility Chart*

Displays	PCC	AT	XT	PC	PC*jr*	RT	370	3270
IBM Enhanced Color Display and Enhanced Graphics Adapter		•	•	•		•	•	•
IBM Professional Graphics Display and Professional Graphics Controller		•	•	•			•	
IBM PC Convertible Color Display	•							
IBM PC Convertible Monochrome Display	•							
IBM Personal Computer Color Display	•	•	•	•	•		•	
IBM Personal Computer Monochrome Display		•	•	•		•	•	•
IBM PC*jr* Color Display	•				•			
IBM RT PC Advanced Monochrome Graphics Display and Advanced Monochrome Graphics Display Adapter						•		
IBM RT PC Advanced Color Graphics Display and Advanced Color Graphics Display Adapter						•		
IBM RT PC Extended Monochrome Graphics Display and Extended Monochrome Graphics Display Adapter						•		
IBM 3270-PC Color Display (5272)								•

*Displays may require appropriate adapters to function with the systems indicated.

IBM Proprinter XL
The IBM Proprinter XL has a wide carriage that can accommodate 16.5-inch paper, so you can fit your forecasts and spreadsheets on a single page to present the "big picture" to clients. It also has a front control panel that allows you to switch print modes—or even choose "quiet" printing—without having to return to your computer keyboard.

IBM Proprinter
A reliable, three-speed printer, the IBM Proprinter combines utility with performance to produce near-letter-quality documents. It offers several paper-feed selections—including a front feed that can load letters and envelopes automatically.

IBM Quietwriter Printer Model 2
An enhanced version of the Quietwriter,® this printer lets you create all-points-addressable graphics that can be combined with text for professional-looking documents. It even lets you print directly on transparencies to create impressive business presentations.

IBM Quietwriter Printer
True to its name, the IBM Quietwriter Printer prints documents quietly with letter-quality results. It offers several paper-feed options, a range of type styles, and special scientific, engineering and multilingual characters and symbols.

IBM Wheelprinter
For high-volume, letter-quality printing jobs, you can depend on the IBM Wheelprinter.™ It offers a variety of automatic paper-feed capabilities and supports unattended printing—freeing you to move on to other projects.

IBM Wheelprinter E
The IBM Wheelprinter E gives you low-cost, letter-quality printing for home or office use. Featuring a choice of nine type styles and automatic or manual paper feeds, it's suitable for printing letters, term papers, invoices or mailing lists.

IBM Color Jetprinter
Using ink-jet technology, the compact IBM Color Jetprinter provides seven vivid colors for printing charts, graphs, artwork and text. It also features quiet operation and near-letter-quality results.

IBM Pageprinter
A hardworking tabletop printer, the IBM Pageprinter uses advanced, nonimpact LED technology—not offered by any other IBM printer—to produce letter-quality text and high-resolution, all-points-addressable graphics.

IBM PC Compact Printer
Small and lightweight, the IBM PC Compact Printer is a low-cost thermal printer that delivers high-quality hard copy quickly.

IBM PC Convertible Printer
Attach the lightweight, compact IBM PC Convertible Printer to the back of the PC Convertible to print near-letter-quality documents on the spot...wherever business takes you. You can power it from PC Convertible's built-in battery pack, a car battery, or an electrical outlet.

Printer Compatibility Chart

Printers	PCC	AT	XT	PC	PC*jr*	RT	370	3270
IBM Proprinter XL	•	•	•	•	•		•	•
IBM Proprinter	•	•	•	•	•	•	•	•
IBM Quietwriter Printer Model 2		•	•	•	•	•	•	•
IBM Quietwriter Printer		•	•	•	•	•	•	•
IBM Wheelprinter		•	•	•	•		•	•
IBM Wheelprinter E		•	•	•	•		•	•
IBM Color Jetprinter	•	•	•	•	•			•
IBM Pageprinter		•	•	•		•		•
IBM PC Compact Printer			•	•	•			
IBM PC Convertible Printer	•							

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[1] DOS 3.20 is required to use a 3.5-inch diskette drive.

[2] Refers to 8½ x 11-inch, double-spaced typewritten pages.

[3] The number of available colors for graphics increases to 16 when the display is used with an IBM Enhanced Graphics Adapter.

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